

EPA Region 5 Records Ctr. 223161

April 19, 2004

Mr. Nabil S. Fayoumi
U. S. Environmental Protection Agency - Region 5
Superfund Division
77 West Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

RE: CH2M Hill Comments on the Groundwater Control Memorandum of March 8, 2004 Sing A Area 2 Sik Sing & IC

Dear Nabil:

Attached is our response to the comments referenced above. Please refer to the WGK CA 750 Groundwater Migration Under Control Addendum for a thorough presentation of the data.

- Under the CERCLA UAO for the Sauget Area 2 Sites Interim Groundwater Remedy, groundwater control is maintained by operating the Groundwater Migration Control System (GMCS) in accordance with the pumping rate look-up tables included in the Record of Decision (ROD).
- Under the RCRA AOC and CA750 Environmental Indicator (Groundwater Migration Under Control) for the W.G. Krummrich plant, groundwater control is maintained by demonstrating that groundwater causing a significant impact on surface water is hydraulically controlled.
- Documents demonstrating groundwater control by these two measures are submitted to both RCRA and CERCLA so that each regulatory program is fully informed on performance of the Sauget Area 2 Groundwater Migration Control System.
- Construction of the groundwater extraction system is complete; however, construction of the barrier wall is ongoing. Groundwater-level contouring, as shown in the March 8, 2004 Tech Memo, is adequate for its intended purpose to show a trough around the extraction wells and hydraulic control of groundwater discharge to surface water. Water-level measurement piezometers designed for measuring water-level gradients across the completed barrier wall are now being used, in conjunction with water-level data from the extraction wells and existing monitoring wells, to provide information for demonstrating hydraulic control. These water-level measurements provide enough information on hydraulic control to make a determination as to whether or not control is achieved.

- During a good portion of February and March 2004, surface water levels were higher than groundwater levels. Under these conditions, gradients reverse and there is no groundwater discharge to surface water.
- The presence of a slurry trench/barrier wall starting at EW-1 and extending 300 ft. south of EW-3, downgradient of the extraction wells makes the continuity of the hydraulic trough between extraction wells EW-1/2 and EW-2/3 a moot issue. Groundwater migration is controlled in this area by the presence of a physical obstruction - the partially completed barrier wall.
- A more comprehensive analysis of hydraulic control was submitted to USEPA RCRA today (April 19th, 2004) with an information copy sent to USEPA CERCLA

Any questions, please advise.

Sincerely,

Steven D. Smith

cc email only: Ken Bardo - USEPA

Sandra Bron - IEPA Mike Coffey - USF&W Chris English - CH2M Hill

Glen Kurowski - Monsanto

Bruce Yare – Solutia Richard Williams -Solutia